

# Customer Release Notes

## VSP Operating System Software

Software Release 7.1.6.0

February 2020

### INTRODUCTION:

This document provides specific information for version 7.1.6.0 of agent software for the VSP Operating System Software.

The purpose of this version is to address customer and internally found software issues.

**Extreme Networks recommends that you thoroughly review this document prior to installing or upgrading this product.**

**For the latest firmware versions, visit the download site at:**  
[www.extremenetworks.com/support/](http://www.extremenetworks.com/support/)

### IMPORTANT NOTES BEFORE UPGRADING TO THIS RELEASE:

If upgrading systems from either release 4.2.1.0 or release 4.2.1.1 that have ISIS enabled link(s) configured with HMAC-MD5 authentication, then you need to perform the procedure described in the section **SPECIAL INSTRUCTIONS FOR UPGRADING FROM PREVIOUS RELEASES** in order to avoid potential network connectivity loss.

If upgrading systems running 4.1.X releases which also have TACACS+ enabled, refer to the section **SPECIAL INSTRUCTIONS FOR UPGRADING FROM PREVIOUS RELEASES** for upgrade instructions.

If upgrading systems running 6.0.x releases or older, refer to the section **SPECIAL INSTRUCTIONS FOR UPGRADING FROM PREVIOUS RELEASES** for instructions about the need to step-through a 6.1.x release prior to going to 7.1.x release.

### PLATFORMS SUPPORTED:

#### Virtual Services Platform 4000 Series

- Virtual Services Platform VSP 4850GTS
- Virtual Services Platform VSP 4850GTS-PWR+
- Virtual Services Platform VSP 4450GSX-PWR+
- Virtual Services Platform VSP 4450GSX-DC
- Virtual Services Platform VSP 4450GTS-DC
- Virtual Services Platform VSP 4450GTX-HT-PWR+

#### Virtual Services Platform 7200 Series

- Virtual Services Platform VSP 7254XSQ
- Virtual Services Platform VSP 7254XTQ

Virtual Services Platform 8000 Series  
 Virtual Services Platform 8200  
 Virtual Services Platform 8400

### SPECIAL INSTRUCTIONS FOR UPGRADING FROM PREVIOUS RELEASES:

1. The following procedure should be followed when upgrading systems running one of the following two releases, 4.2.1.0 or 4.2.1.1 which also have ISIS enabled links with HMAC-MD5 authentication on:

Disable ISIS authentication throughout the network a system at a time, a link at a time by disabling it on either side of each link, ensuring the link is stable before moving to the next. When a system has been reconfigured free of ISIS HMAC-MD5 authentication in all of its links, save the configuration file and perform the upgrade to release 4.2.3.0 or greater. After all these systems have been upgraded to release 4.2.3.0 or greater, you may re-enable authentication a system at a time, a link at a time and save the configuration file in each of the involved systems.

Example:

```
VSP:1(config)#interface gigabitethernet x/y
VSP:1(config-if)#no isis hello-auth
VSP:1(config-if)#save config
VSP:1(config-if)# PERFORM THE UPGRADE
VSP:1(config)#interface gigabitethernet x/y
VSP:1(config-if)# isis hello-auth type hmac-md5 key <keyname> [key-id
<keyed>]
VSP:1(config-if)#save config
```

2. The following procedure should be followed when upgrading systems running 4.1.X releases which also have TACACS+ enabled on:

When you upgrade from VOSS 4.1.X to VOSS 4.2 or a higher release, the TACACS+ host configurations will be lost. After the upgrade, the TACACS+ host configurations will not take effect so you must reconfigure them. After you make the configurations, you must save the changes on the device. You should also save the configuration to a file to retain the configuration settings.

3. Upgrading DVR configurations from releases 6.0.1.1 and earlier to 6.0.1.2 and beyond.
  - a. All DVR nodes must be upgraded to the same release.
  - b. All DVR leaves should be upgraded first.
4. Upgrading from releases 6.0.x and earlier
  - a. Direct upgrade from 6.0.x or earlier releases to 7.x releases is not supported.
  - b. Please upgrade to a 6.1.x release first (Release 6.1.6.0 or higher is recommended). Then upgrade to the desired 7.x release (Release 7.1.1.0 or higher recommended).

Review items 5, 6, and 7 if your networks have Zero Touch Fabric (ZTF) enabled or the ISIS L1 area is **00.1515.fee1.900d.1515.fee1.900d**.

5. Legacy ZTF Procedures for Releases 7.0.0.0 - 7.1.2.0, 8.0.0.0, 8.0.1.0, and 8.0.5.0
  - a. Boot with factory-defaults fabric.
  - b. ISIS manual-area set to 00.0000.0000, Dynamically Learned Area (DLA) displayed as 00.0000.0000 and ISIS enabled with other parameters.
  - c. HELLO PDUs not sent.

- d. Listen on active ISIS interfaces for ISIS HELLO with non-zero Area ID. Zeros of any length up to 13 bytes are considered a zero value.
- e. When an ISIS HELLO with a non-zero Area ID is received, use that area ID as the DLA and start sending HELLO with DLA on all ISIS interfaces.
- f. DLA set and displayed as learned in the previous step.
- g. Saving the configuration will save into the configuration file `manual-area 00.0000.0000`.
- h. Boot with the saved configuration. The ZTF procedures are triggered. ISIS interfaces in passive mode not sending ISIS HELLOs. Only process incoming ISIS HELLO with non-zero Area ID.

Note: You can reach the fourth step by manually configuring the ISIS/SPBM with a manual-area equal to 0 (all values of 0, regardless of the length of zeros, are considered the same) and enabling ISIS.

6. Modified ZTF Procedures for Releases 7.1.3.0+ and Future 8.x
  - a. Boot with factory-defaults fabric
  - b. ISIS manual-area set to `00.1515.fee1.900d.1515.fee1.900d`, Dynamically Learned Area (DLA) is blank and ISIS enabled with other parameters.
  - c. HELLO PDUs not sent
  - d. Listen on active ISIS interfaces for ISIS HELLO with and Area ID not equal to `00.1515.fee1.900d.1515.fee1.900d`.
  - e. When an ISIS HELLO with an Area ID not equal to `00.1515.fee1.900d.1515.fee1.900d` is received, use that Area ID as the DLA and start sending HELLO with DLA on all ISIS interfaces.
  - f. DLA set and displayed as learned in the previous step.
  - g. Saving the configuration file will save into the configuration file `manual-area 00.1515.fee1.900d.1515.fee1.900d`.
  - h. Boot with the saved configuration. ZTF procedures are triggered. ISIS interfaces in passive mode not sending ISIS HELLO's, only processing incoming ISIS HELLO with an Area ID not equal to `00.1515.fee1.900d.1515.fee1.900d`.

Note: You can reach the fourth step by manually configuring the ISIS/SPBM with a manual-area equal to `00.1515.fee1.900d.1515.fee1.900d` and enabling ISIS.

7. Migration to a Release supporting Modified ZTF such as 7.1.3.0
  - a. From Pre-ZTF feature Release such as 6.1.6.0

The following considerations should be taken into account when upgrading to this release from a pre-ZTF release:

- Check the ISIS manual area (`show isis manual-area`).
- Determine if the manual area equals `00.1515.fee1.900d.1515.fee1.900d`.
- This is a normal Area ID before the upgrade. After the upgrade to 7.1.3.0, ZTF procedures, as previously described, will be triggered.
- If the existing behavior is desired, the ISIS manual area used in the network needs to be changed to a different value. Note, if ISIS is the management network used to get to the node, it will not form an ISIS adjacency after the upgrade and not join the network. This

will isolate the node. The changes to the manual area within the topology should be made before any upgrades are performed.

- b. From a Release Running Legacy ZTF such as 7.1.2.0

The following considerations should be taken into account when upgrading to a release supporting Modified ZTF from a Legacy ZTF release.

- Check the ISIS manual area (`show isis manual-area`).
- Determine if the manual area equals `00.0000.0000` or is a `00` of any length.
- This Area ID triggered the ZTF procedures before the upgrade. After the upgrade to 7.1.3.0, ZTF procedures, as previously described, will **NOT** be triggered.
- If the existing behavior is desired, replace the value of ISIS manual area with `00.1515.fee1.900d.1515.fee1.900d`. Note, if ISIS is the management network used to get to the node, it will not form an ISIS adjacency after the upgrade and not join the network. This will isolate the node. The change should be made before the upgrade.
- Determine if the manual area equals `00.1515.fee1.900d.1515.fee1.900d`.
- This is a normal Area ID before the upgrade. After the upgrade to a release implementing Modified ZTF, the ZTF procedures, as previously described, will be triggered.
- If this is not desired, replace the value of ISIS manual area with a different value. Note, if ISIS is the management network used to get to the node, it will not form an ISIS adjacency after the upgrade and not join the network. This will isolate the node. The change should be made before the upgrade.

#### NOTES FOR UPGRADE:

Please see “Release Notes for VSP Operating System” for software release 7.1.0, available at <https://www.extremenetworks.com/support/release-notes> for details regarding Known Limitations.

#### FILE NAMES FOR THIS RELEASE:

Virtual Services Platform 4000 Series

File Name	Module or File Type	File Size (bytes)
VOSS4K.7.1.6.0.tgz	Release 7.1.6.0 archived software distribution	143900413
VOSS4K.7.1.6.0_mib.zip	Archive of all MIB files	1119108
VOSS4K.7.1.6.0_mib.txt	MIB file	7417835
VOSS4K.7.1.6.0_mib_sup.txt	MIB file	1272581
VSP4000v711_HELP_EDM_gzip.zip	EDM Help file	3960940
VOSS4K.7.1.6.0.md5	MD5 Checksums	578
VOSS4K.7.1.6.0.sha512	SHA512 Checksums	1538

## Virtual Services Platform 7200 Series

File Name	Module or File Type	File Size (bytes)
VOSS7K.7.1.6.0.tgz	Release 7.1.6.0 archived software distribution	104544443
VOSS7K.7.1.6.0_mib.zip	Archive of all MIB files	1119108
VOSS7K.7.1.6.0_mib.txt	MIB file	7417835
VOSS7K.7.1.6.0_mib_sup.txt	MIB file	1275181
VOSSv711_HELP_EDM_gzip.zip	EDM Help file	3960940
VSP7K.7.1.6.0.md5	MD5 Checksums	572
VOSS7K.7.1.6.0.sha512	SHA512 Checksums	1532

## Virtual Services Platform 8000 Series

File Name	Module or File Type	File Size (bytes)
VOSS8K.7.1.6.0.tgz	Release 7.1.6.0 archived software distribution	160,050,578
VOSS8K.7.1.6.0_mib.zip	Archive of all MIB files	1119108
VOSS8K.7.1.6.0_mib.txt	MIB file	7417835
VOSS8K.7.1.6.0_mib_sup.txt	MIB file	1,275,181
VOSSv711_HELP_EDM_gzip.zip	EDM Help file	3960940
VSP8K.7.1.6.0.md5	MD5 Checksums	572
VOSS8K.7.1.6.0.sha512	SHA512 Checksums	1532

**Note about image download:**

Ensure images are downloaded using the binary file transfer. Perform MD5 checksum check on downloaded files to ensure file integrity.

Check that the file type suffix is “.tgz” and the image names after download to device match those shown in the above table. Some download utilities have been observed to append “.tar” to the file name or change the filename extension from “.tgz” to “.tar”. If file type suffix is “.tar” or file name does not exactly match the names shown in above table, rename the downloaded file to the name shown in the table above so that the activation procedures will operate properly.

**Load activation procedures:**

```
software add VOSS4K.7.1.6.0.tgz
software activate VOSS4K.7.1.6.0.GA
```

**or**

```
software add VOSS7K.7.1.6.0.tgz
software activate VOSS7K.7.1.6.0.GA
```

**or**

```
software add VOSS8K.7.1.5.0.tgz
software activate VOSS8K.7.1.6.0.GA
```

**VERSION OF PREVIOUS RELEASE:****Virtual Services Platform 4000 Series**

Software Version 3.0.0.0, 3.0.1.0, 3.1.0.0, 3.1.0.2, 3.1.0.3, 4.0.0.0, 4.0.0.1, 4.0.0.2, 4.0.0.3, 4.1.0.0, 4.1.0.1, 4.2.0.0, 4.2.0.1, 4.2.1.0, 4.2.1.1, 4.2.2.0, 4.2.3.0, 5.0.0.0, 5.0.1.0, 5.1.0.0, 5.1.1.0, 5.1.1.1, 5.1.1.2, 5.1.1.3, 5.1.1.4, 6.0.0.0, 6.0.1.0, 6.0.1.1, 6.0.1.2, 6.1.0.0, 6.1.1.0, 6.1.2.0, 6.1.2.1, 6.1.3.0, 6.1.3.1, 6.1.3.2, 6.1.4.0, 6.1.5.0, 6.1.6.0, 7.1.0.0, 7.1.0.1, 7.1.1.0, 7.1.2.0, 7.1.3.0, 7.1.4.0 and 7.1.5.0 for VSP 4850GTS platforms

Software version 4.0.0.0, 4.0.0.1, 4.0.0.2, 4.0.0.3, 4.1.0.0, 4.1.0.1, 4.2.0.0, 4.2.0.1, 4.2.1.0, 4.2.1.1, 4.2.2.0, 4.2.3.0, 5.0.0.0, 5.0.1.0, 5.1.0.0, 5.1.1.0, 5.1.1.1, 5.1.1.2, 5.1.1.3, 5.1.1.4, 6.0.0.0, 6.0.1.0, 6.0.1.1, 6.0.1.2, 6.1.0.0, 6.1.1.0, 6.1.2.0, 6.1.2.1, 6.1.3.0, 6.1.3.1, 6.1.3.2, 6.1.4.0, 6.1.5.0, 6.1.6.0, 7.1.0.0, 7.1.0.1, 7.1.1.0, 7.1.2.0, 7.1.3.0, 7.1.4.0 and 7.1.5.0 for VSP 4450GSX platform

Software Version 4.0.50.0 4.2.1.1, 4.2.2.0, 4.2.3.0, 5.0.0.0, 5.0.1.0, 5.1.0.0, 5.1.1.0, 5.1.1.1, 5.1.1.2, 5.1.1.3, 5.1.1.4, 6.0.0.0, 6.0.1.0, 6.0.1.1, 6.0.1.2, 6.1.0.0, 6.1.1.0, 6.1.2.0, 6.1.2.1, 6.1.3.0, 6.1.3.1, 6.1.3.2, 6.1.4.0, 6.1.5.0, 6.1.6.0, 7.1.0.0, 7.1.0.1, 7.1.1.0, 7.1.2.0, 7.1.3.0, 7.1.4.0 and 7.1.5.0 for VSP 4450GSX DC and VSP 4450GTS DC platforms

Software Version 4.0.40.0, 4.1.0.0, 4.1.0.1, 4.2.0.0, 4.2.0.1, 4.2.1.0 4.2.1.1, 4.2.2.0, 4.2.3.0, 5.0.0.0, 5.0.1.0, 5.1.0.0, 5.1.1.0, 5.1.1.1, 5.1.1.2, 5.1.1.3, 5.1.1.4, 6.0.0.0, 6.0.1.0, 6.0.1.1, 6.0.1.2, 6.1.0.0, 6.1.1.0, 6.1.2.0, 6.1.2.1, 6.1.3.0, 6.1.3.1, 6.1.3.2, 6.1.4.0, 6.1.5.0, 6.1.6.0, 7.1.0.0, 7.1.0.1, 7.1.1.0, 7.1.2.0, 7.1.3.0, 7.1.4.0 and 7.1.5.0 for VSP 4450GTX-HT-PWR+ platform

**Virtual Services Platform 7200 Series**

Software Version 4.2.1.0, 4.2.1.1, 4.2.2.0, 4.2.3.0, 5.0.0.0, 5.0.1.0, 5.1.0.0, 5.1.1.0, 5.1.1.1, 5.1.1.2, 5.1.1.3, 5.1.1.4, 6.0.0.0, 6.0.1.0, 6.0.1.1, 6.0.1.2, 6.1.0.0, 6.1.1.0, 6.1.2.0, 6.1.2.1, 6.1.3.0, 6.1.3.1, 6.1.3.2, 6.1.4.0, 6.1.5.0, 6.1.6.0, 7.1.0.0, 7.1.0.1, 7.1.1.0, 7.1.2.0, 7.1.3.0, 7.1.4.0 and 7.1.5.0

**Virtual Services Platform 8000 Series**

Software Version 4.0.0.0, 4.0.1.0, 4.0.1.1, 4.0.1.2, 4.0.1.3, 4.0.1.4, 4.1.0.0, 4.1.0.1, 4.2.0.0, 4.2.0.1, 4.2.1.0, 4.2.1.1, 4.2.2.0, 4.2.3.0, 5.0.0.0, 5.0.1.0, 5.1.0.0, 5.1.1.0, 5.1.1.1, 5.1.1.2, 5.1.1.3, 5.1.1.4, 6.0.0.0, 6.0.1.0, 6.0.1.1, 6.0.1.2, 6.1.0.0, 6.1.1.0, 6.1.2.0, 6.1.2.1, 6.1.3.0, 6.1.3.1, 6.1.3.2, 6.1.4.0, 6.1.5.0, 6.1.6.0, 7.1.0.0, 7.1.0.1, 7.1.1.0, 7.1.2.0, 7.1.3.0, 7.1.4.0 and 7.1.5.0 for VSP8200 platform

Software Version, 4.2.0.0, 4.2.0.1, 4.2.1.0, 4.2.1.1, 4.2.2.0, 4.2.3.0, 5.0.0.0, 5.0.1.0, 5.1.0.0, 5.1.1.0, 5.1.1.1, 5.1.1.2, 5.1.1.3, 5.1.1.4, 6.0.0.0, 6.0.1.0, 6.0.1.1, 6.0.1.2, 6.1.0.0, 6.1.1.0, 6.1.2.0, 6.1.2.1, 6.1.3.0, 6.1.3.1, 6.1.3.2, 6.1.4.0, 6.1.5.0, 6.1.6.0, 7.1.0.0, 7.1.0.1, 7.1.1.0, 7.1.2.0, 7.1.3.0, 7.1.4.0 and 7.1.5.0 for VSP8404 platform

Software Version, 5.3.0.0, 6.1.0.0, 6.1.1.0, 6.1.2.0, 6.1.2.1, 6.1.3.0, 6.1.3.1, 6.1.3.2, 6.1.4.0, 6.1.5.0, 6.1.6.0, 7.1.0.0, 7.1.0.1, 7.1.1.0, 7.1.2.0, 7.1.3.0, 7.1.4.0 and 7.1.5.0 for VSP8404c platform

**COMPATIBILITY:**

This software release is managed with Enterprise Device Manager (EDM), which is integrated into the agent software.

**CHANGES IN THIS RELEASE:****New Features in This Release**

New **force** option for VLAN I-SID mapping CLI configuration:

```
vlan i-sid <vlan-id> <i-sid> force
```

**Old Features Removed From This Release**

None.

**Problems Resolved in This Release**

VOSS-13713 VOSS-16496	Node reset during "show isis spbm ip-multicast detail" when length of egress port list exceeds 400 characters.
VOSS-14531 VOSS-16276	Incorrect Temperature Alarm  Correct the Warning/Critical temperature Threshold values for trident2 platform sensors to ensure the threshold ranges are different for different sensors. Based on these ranges the warning alarms are raised respectively. The values for each sensors are updated in the installation document.
VOSS-15106	Using EDM, select multiple ports, edit General and last change shows all zeros
VOSS-15486	When creating new users, "@" character is allowed for the password. However, the login fails when the same password is re-entered after save config and reboot..
VOSS-15550	FE Tunnels are not getting established after direct routes in non-GRT VRFs were toggled.
VOSS-15568	Changing mlt vlan i-sid association by FA proxy falsely indicates to XMC that config was modified
VOSS-15643	COP-SW ERROR ercdProclpRecMsg: Failed to Replace IP Record.' is displayed when a blackhole route is added
VOSS-15724	Auth trap IP addresses displayed as all 255s.
VOSS-15738	VSP may reset when creating a new user with 22 Character password.
VOSS-15846	Packets destined to blackhole route reach CPU.
VOSS-15870	"show interfaces mgmtEthernet error verbose" may exhibit wrong error count numbers
VOSS-15873	PIM neighbor transitions may cause memory leak and node reset.
VOSS-15881	Add force option for vlan i-sid mapping in CLI

VOSS-16322	When vrrp is disabled on an interface all the dhcp-relay fwd paths that exist on the interface and use the ip of the interface as their agent address are deleted.
VOSS-16345	Disable logging for tftp on non-mgmt vrf interfaces.

### OUTSTANDING ISSUES:

Please see "Release Notes for VSP Operating System" for software release 7.1.0 available at <https://www.extremenetworks.com/support/release-notes> for details regarding Known Issues.

### KNOWN LIMITATIONS:

Please see "Release Notes for VSP Operating System" for software release 7.1.0 available at <https://www.extremenetworks.com/support/release-notes> for details regarding Known Limitations.

### DOCUMENTATION CORRECTIONS:

For other known issues, please refer to the product release notes and technical documentation available at: <https://www.extremenetworks.com/support/documentation>.

### GLOBAL SUPPORT

By Phone: +1 800-998-2408 (toll-free in U.S. and Canada)

For the toll-free support number in your country:  
[www.extremenetworks.com/support/](http://www.extremenetworks.com/support/)

By Email: [support@extremenetworks.com](mailto:support@extremenetworks.com)

By Web: [www.extremenetworks.com/support/](http://www.extremenetworks.com/support/)

By Mail: Extreme Networks, Inc.  
6480 Via Del Oro  
San Jose, CA 95119

For information regarding the latest software available, recent release note revisions, or if you require additional assistance, please visit the Extreme Networks Support website.



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